



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,505	09/03/2004	Yoshihiro Hori	70456-056	2825
7590 Gene Z. Robinson McDermott Will & Emery 600 13th Street N W Washington, DC 20005-3096		EXAMINER LAFORGLA, CHRISTIAN A		
		ART UNIT 2439		
		MAIL DATE 05/29/2009		
		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/506,505

**Applicant(s)**

HORI ET AL.

**Examiner**

Christian LaForgia

**Art Unit**

2439

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date 2/24/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. The amendment of 18 February 2009 has been noted and made of record.
2. Claims 1-16 have been presented for examination.

***Response to Arguments***

3. Applicant's arguments filed 18 February 2009 have been fully considered but they are not persuasive.
4. The applicant argues that the provisional, obvious-type double patenting rejection is improper because application number 10/522,176 fails to disclose at least two claimed limitations. The examiner agrees that the prior art does not teach the argued limitations, and asserts that was the reason for the obvious-type double patenting rejection. The present invention and the invention of co-pending application 10/522,176 appear to be different embodiments of the same, or at least similar, base invention. In other words, both applications claim a species from a specific genus claim. Both independent claims are drawn to a data storage device performing input/output of classified data in accordance with certain procedures for the protection of said classified data. Furthermore, both inventions claim an interface portion for externally exchanging data; a storage portion for storing classified data, a log section for recording input/output information regarding the classified data, and a control portion for controlling the input/output of said classified data. For these reasons, the double patenting rejection is maintained.
5. The applicant argues that the provisional, obvious-type double patenting rejection is improper because application number 10/340,832 to disclose at least two claimed limitations. The examiner agrees that the prior art does not teach the argued limitations, and asserts that was

the reason for the obvious-type double patenting rejection. The present invention and the invention of co-pending application 10/340,832 appear to be different embodiments of the same, or at least similar, base invention. In other words, both applications claim a species from a specific genus claim. Both independent claims are drawn to a data storage device performing input/output of classified data in accordance with certain procedures for the protection of said classified data. Furthermore, both inventions claim an interface portion for externally exchanging data; a storage portion for storing classified data, a log section for recording input/output information regarding the classified data, and a control portion for controlling the input/output of said classified data. For these reasons, the double patenting rejection is maintained.

#### ***Information Disclosure Statement***

6. The information disclosure statement (IDS) submitted on 24 February 2009 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

#### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference

claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); an *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

8. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

9. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-16 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-9 of copending Application No. 10/522,176. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

11. The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows (related subject matter shown as **bold**):

Claim 1 of instant application	Claim 1 of Application No. 10/522,176
1. A data storage device performing input/output of classified data in accordance	1. A data storage device for performing input/output of classified data in accordance

<p>with predetermined input/output procedures for protection of said classified data, and storing said classified data, comprising:</p> <ul style="list-style-type: none"><li><b>an interface portion externally exchanging data;</b></li><li><b>a first storage portion storing said classified data; and</b></li><li><b>a second storage portion storing log information related to the input/output of said classified data according to said predetermined input/output procedures and an address representing a storage position of said classified data to be input/output in said first storage portion,</b></li></ul> <p>wherein said log information includes:</p> <ul style="list-style-type: none"><li>an identification code identifying said classified data to be input/output, and</li><li>a first status information representing a state of storage of said classified data to be input/output in said first storage portion;</li></ul> <p>said data storage device further comprising <b>a control portion controlling the input/output of said classified data,</b> wherein and</p> <ul style="list-style-type: none"><li>said first storage portion further stores a flag, corresponding to said classified data, indicating whether said classified data can be used or not, and</li><li>said control portion determines the state of storage of said classified data to be input/output in said first storage portion according to a comparison of an identification code of classified data stored at a storage position in said first storage portion specified by said address with an identification code stored in said second storage portion, and a state of said flag corresponding to said classified data to be input/output.</li></ul>	<p>with a constant procedure, storing said classified data, and operating to store history information or update at appropriate timing said history information in accordance with said constant procedure, comprising:</p> <ul style="list-style-type: none"><li><b>an interface performing external input/output of data;</b></li><li><b>a data storage portion storing said plurality of classified data;</b></li><li><b>a log storage portion storing a plurality of items of the history information relating to the input/output of said classified data; and</b></li><li><b>a control portion controlling the input/output of said classified data,</b> wherein</li></ul> <p>said log storage portion is provided as a ring buffer circulatively utilizing two or more regions each storing one item of said history information,</p> <p>each of the plurality of items of said history information stored in said log storage portion includes identification information identifying the classified data storing the history information and being to be input/output, and</p> <p>said control portion receives the identification information identifying the classified data to be input/output in accordance with start of input/output processing of said classified data, searches a plurality of regions in said log storage portion in a predetermined order, determines the region storing the earliest item of the history information stored in said log storage portion as the earliest region, and newly stores the history information relating to the input/output processing of said classified data including said received identification information in the determined earliest region.</p>
---	--

12. Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application.

13. Claims 1-16 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-15 of copending Application No. 10/340,832. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

14. The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows (related subject matter shown as **bold**):

Claim 1 of instant application	Claim 1 of Application No. 10/340,832
<p>1. A data storage device performing input/output of classified data in accordance with predetermined input/output procedures for protection of said classified data, and storing said classified data, comprising:</p> <p><b>an interface portion externally exchanging data;</b></p> <p><b>a first storage portion storing said classified data; and</b></p> <p><b>a second storage portion storing log information related to the input/output of said classified data according to said predetermined input/output procedures and an address representing a storage position of said classified data to be input/output in said first storage portion,</b></p> <p>wherein said log information includes:</p> <p><b>an identification code identifying said classified data to be input/output, and</b></p> <p><b>a first status information representing a</b></p>	<p>1. A storage apparatus to input/output classified data according to a predetermined procedure, and storing said classified data, comprising:</p> <p><b>an interface for data input/output with an external source,</b></p> <p><b>a data storage unit storing said classified data,</b></p> <p><b>a plurality of log storage units storing history information associated with input/output of said classified data, and</b></p> <p><b>a control unit controlling input/output of said classified data,</b></p> <p><b>each of the plurality of history information stored in said plurality of log storage units including identification information to identify classified data,</b></p> <p><b>wherein said control unit receives via said interface said identification information identifying classified data that has become a subject of input/output in response to</b></p>

<p>state of storage of said classified data to be input/output in said first storage portion; said data storage device further comprising <b>a control portion controlling the input/output of said classified data</b>, wherein and</p> <p>said first storage portion further stores a flag, corresponding to said classified data, indicating whether said classified data can be used or not, and</p> <p>said control portion determines the state of storage of said classified data to be input/output in said first storage portion according to a comparison of an identification code of classified data stored at a storage position in said first storage portion specified by said address with an identification code stored in said second storage portion, and a state of said flag corresponding to said classified data to be input/output.</p>	<p>commencement of an input/output process of said classified data, selects a log storage unit that stores history information including said received identification information out from said plurality of log storage units when there is such a log storage unit, and stores history information according to a progress of a procedure for said classified data input/output into said selected log storage unit .</p>
---	---

15. Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application.

*Allowable Subject Matter*

16. Claims 1-16 would be allowable if the double patenting rejections set forth in this Office action were overcome.

*Conclusion*

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian LaForgia whose telephone number is (571)272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.



18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christian LaForgia/  
Primary Examiner, Art Unit 2439

clf